

REMARKS/ARGUMENTS

Claims 1-12, 19 and 21-35 are pending in the present application. All of these claims have been currently amended. Support for the amended claims can be found throughout the specification and in the original claims. Particular support amended Claims 1 and 9 can be found on pages 3-5 and 55 of the specification, and in original Claims 1 and 9. No new matter is believed to have been introduced by the amended claims.

Applicants have amended Claim 1 to remove the phrase "such as." Applicants direct the Examiner's attention to the Preliminary Amendment filed July 30, 2002, in which Claim 7 was previously amended, and in which the phrase "such as" was removed from this claim. Applicants have also amended Claim 12 to remove the term "PSS-PAA." Applicants respectfully submit that these amendments now obviate the Examiner's objections to the claims, and request the withdrawal of the objection.

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected Claims 1, 3, 4, 6-12, 19, 24-27 and 32-35 under 35 U.S.C. § 103(a), as unpatentable over U.S. 5,866,664 to McCallum, III et al. (hereinafter McCallum). Applicants traverse this rejection for the following reasons.

McCallum discloses a process for efficiently using phosphorus acid, or salts thereof, as a chain transfer agent in the polymerization of monomers, particularly unsaturated carboxylic acid monomers. The polymerization is conducted at an in-process solids level of at least 40 percent and an in-process neutralization level of at least 30 percent to produce low molecular weight, water-soluble phosphonate-terminated polymers (see Abstract).

McCallum discloses that neutralization may take place prior to polymerization or during polymerization, and that if neutralization takes place during polymerization, the neutralizing solution may be fed separately, cofed, or fed with one or more other feeds (see column 5,

lines 55-61). McCallum also discloses that the neutralization may be effected with an alkaline neutralizer, which may be an inorganic or organic base (see column 5, lines 61-62). However, this reference does not teach or suggest effecting neutralization, during polymerization, by the consecutive addition of first, one or more bases selected from sodium hydroxide, potassium hydroxide or lithium hydroxide, and then one or more bases selected from calcium hydroxide, calcium oxide, magnesium hydroxide or magnesium oxide. Therefore, McCallum does not teach or suggest now pending Claims 1, 3, 4, 6-8 and 32-34.

In addition, McCallum discloses neutralizations using only one type of neutralizing agent, usually sodium hydroxide (see Examples from column 9, line 64 to column 13, line 43). This reference does not disclose neutralization with one or more bases selected from calcium hydroxide, calcium oxide, magnesium hydroxide or magnesium oxide. In addition, this reference does not teach or suggest a homopolymer or copolymer prepared by the method of pending Claim 1, and which contains a degree of neutralization between 10% and 60%, limits included, resulting from the neutralization with one or more ions selected from calcium ion or magnesium ion, in addition to a degree of neutralization between 40% and 90%, limits included, resulting from the neutralization with one or more ions selected from sodium ion, potassium ion or lithium ion. McCallum does not provide any motivation for preparation of a homopolymer or copolymer which contains active sites neutralized as discussed above. Therefore, McCallum does not teach or suggest now pending Claims 9-12, 19, 24-27 and 35.

For at least the above reasons, McCallum does not teach or suggest the invention as now claimed, and thus, the rejection should be withdrawn.

Applicants respectfully submit that the present amendment now places the application in condition for allowance, and respectfully request early notice of such action.

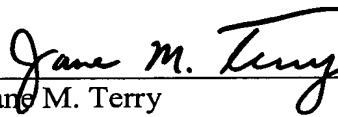
Respectfully submitted,

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